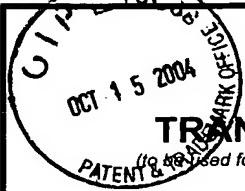


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 <p>TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i></p>		Application Number	10/044,222
		Filing Date	11/21/2001
		First Named Inventor	Robert M. Davis
		Group Art Unit	3653
		Examiner Name	Jonathan R. Miller
Total Number of Pages in This Submission		Attorney Docket Number	2760-047

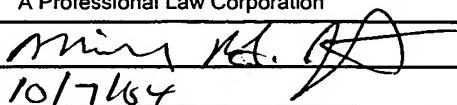
ENCLOSURES (check all that apply)

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<input type="checkbox"/> Certified Copy of Priority Document(s)
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Remarks:

Transmitted herewith in response to the final Office Action mailed May 9, 2004, enclosed are the following: Fee Transmittal, in duplicate, with \$170 check for required fee; Brief on Appeal with three copies; and a prepaid return postcard.

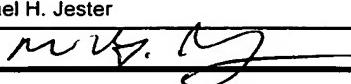
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual Name	(Atty)	Michael H. Jester Reg. No. 28,022 A Professional Law Corporation
Signature		
Date	10/7/04	

CERTIFICATE OF MAILING

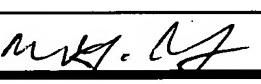
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail (postage pre-paid) in an envelope addressed to: BOARD OF PATENT APPEALS & INTERFERENCES, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this date:

October 7, 2004

Typed or printed name	Michael H. Jester
Signature	
	✓ Date 10-7-04 ✓

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<p style="text-align: center;">OCT 15 2004 U.S. PATENT & TRADEMARK OFFICE FEE TRANSMITTAL</p> <p>Patent fees are subject to annual revision on October 1. These are the fees effective October 1, 1997. Small entity payments must be supported by a small entity statement; otherwise large entity fees must be paid. See Forms PTO/SB/09-12 See 37 C.F.R. §§ 1.27 and 1.28</p>		Complete If Known																																																																																																																	
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<p>1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:</p> <p>Deposit Account Number: <u>50 0626</u> Deposit Account Name: <u>Michael H. Jester</u></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance. 37 CFR 1.311(b)</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p>																																																																																																																			
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SUBMITTED BY			COMPLETE (if applicable)		
Typed or Printed Name	Michael H. Jester			Reg. Number	28,022
Signature				Date	10-7-04
				Deposit Account User ID	50 0626

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 INTERFERENCE
 APPEALS
 (MAY 10/04)



BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF APPEALS AND INTERFERENCES

In re Patent Application of:)
Robert M. Davis) Group Art Unit: 3653
Serial No.: 10/044,222)
Filed: November 21, 2001) Conf. No.: 7918
For: *Articulating Disc Screen Apparatus*)
for Recyclable Materials)

BRIEF ON APPEAL

BOARD OF PATENT APPEALS & INTERFERENCES
Director for Patents and Trademarks
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

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BOARD OF PATENT APPEALS
AND INTERFERENCES

Applicant submits herewith his Brief on Appeal in response to the final Office Action mailed May 19, 2004, rejecting Claims 1-3, 6-19, 21, 22, 24-26 and 28-30 as set forth in the CLAIMS APPENDIX.

This brief complies with the format required in new Rule 41.37. A Notice of Appeal was mailed to the USPTO on August 13, 2004.

1. Real Party in Interest

The real party in interest is CP Manufacturing, Inc., the owner of all right, title and interest in and to the subject application by reason of an assignment recorded in the USPTO on March 12, 2002, at Reel 012711, Frame 0458.

2. Related Appeals and Interferences

There are no related appeals or interferences.

10/044,222
2760-047

Brief on Appeal

10/18/2004 EFLORES 00000009 10044222

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3. *Status of the Claims*

Claims 1-3, 6-19, 21, 22, 24-26 and 28-30 stand rejected.

Claims 4, 5, 23 and 27 stand objected to and allowable if rewritten in independent form.

Claim 20 has been allowed.

4. *Status of Amendments*

There have been no amendments filed subsequent to the final rejection.

5. *Summary of the Claimed Subject Matter*

The present invention relates to machines for processing mixed recyclable materials such as newspaper, magazines, aluminum cans, plastic bottles and glass bottles. More particularly, the present invention relates to disc screen apparatus suited for separating newspaper and/or mixed paper from a stream of mixed recyclable materials.

Referring to Fig. 1A, reproduced hereafter, a first embodiment of the present invention comprises a recycling apparatus 10 that is, essentially, a single continuous waste classifying screen having end-to-end upstream and downstream sections. As explained in the specification beginning on page 4, line 18, the apparatus 10 includes a fixed first frame 12 that supports a first inclined disc screen 14 and an articulating second frame 16 that supports a second inclined disc screen section 18. Each disc screen, such as 14, is comprised of a plurality of shafts 20 whose axes are spaced apart and parallel, and extend laterally between opposite sides of the frame 12. The shafts are located at progressively greater heights spaced along the longitudinal conveying direction (from left to right in Fig. 1A). The first and second inclined disc screen sections 14 and 18 each have a plurality of discs 22 mounted on the shafts 20 at predetermined laterally spaced intervals. The discs 22 on each shaft 20 are interleaved with, and overlapped in the longitudinal direction, with the discs 22 on the adjacent shafts.

As explained in the specification beginning on page 5, line 23, and as illustrated in Fig. 1C reproduced hereafter, the discs 22 of the first disc screen section 14 are rotated in a

common clockwise direction by a drive D1. The discs 22 of the second disc screen section 18 are driven in a common clockwise direction by another drive D2. Mixed recyclable material is fed onto the first disc screen section 14 by a conveyor 24 (Fig. 1A). As explained on page 7, beginning in line 12 of the specification, the lower input end of the frame 16 that supports the second inclined disc screen section 18 is pivoted about the highest shaft 20 of the first disc screen section 14 which provides a suitable pivot means diagrammatically indicated by phantom line circle 32 in Fig. 1C. As explained on page 7, beginning in line 18, a hydraulic cylinder 34 may be selectively extended and retracted via control 36 to change the angle of inclination of the second disc screen section 18 relative to the first disc screen section 14. Other means of selectively adjusting the angle of inclination are disclosed in the specification on page 7, lines 20-25. The relative angle of inclination of the second disc screen section 18 is adjusted to optimize the efficiency of the recycling apparatus 10 in terms of ensuring that the maximum amount of clean mixed paper is conveyed off of the upper end of the second disc screen section 18 while mixed containers fall off the lower end of the first disc screen section 14 as indicated in Fig. 1A.

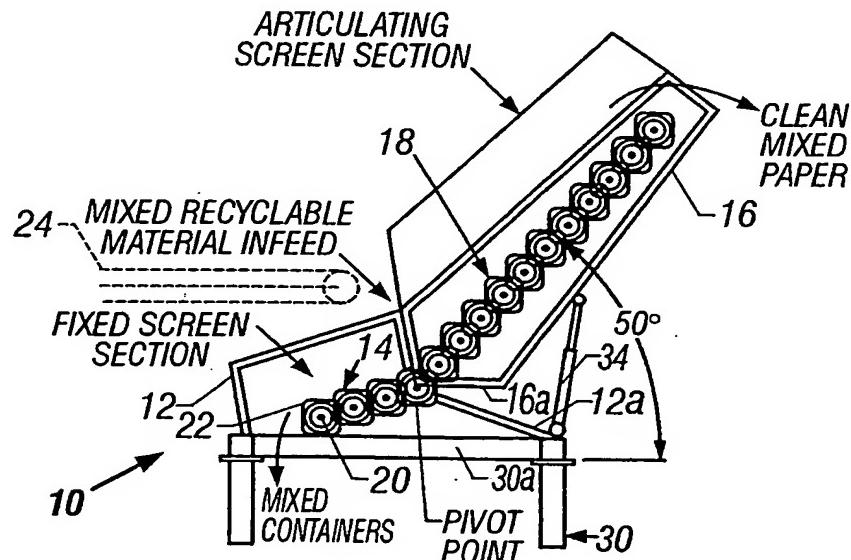
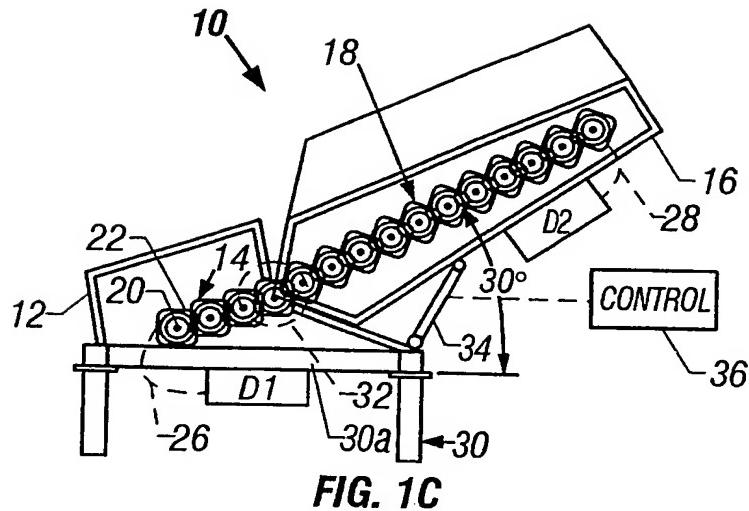


FIG. 1A

“Davis-Applicant”



“Davis-Applicant”

The patentability of the various claims does not stand and fall together.

More particularly, Claims 1-3 and 6-10 represent one group.

Another group is Claims 11-19.

Claims 21, 22, 24-26 and 28-30 represent a third group.

6. Grounds of Rejection to be Reviewed on Appeal

Whether the subject matter of Claims 1-3, 6-19, 21, 22, 24-26 and 28-30 is anticipated by U.S. Patent No. 4,836,388 of Bielagus.

7. Argument

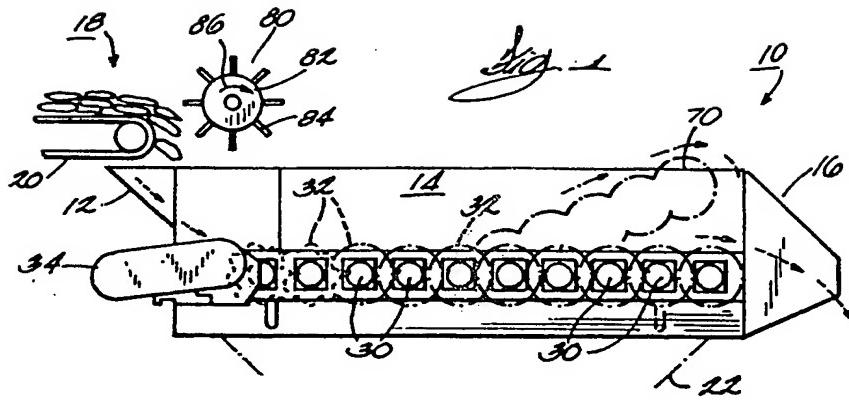
Claims 1-3, 6-19, 21, 22, 24-26 and 28-30 stand rejected for lack of novelty under 35 USC §102(b) over U.S. Patent No. 4,836,388 of Bielagus, hereinafter referred to as '388 Bielagus.

The examiner bears the burden of establishing a *prima facie* case of anticipation. *In re King*, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986). Each claim in issue must first be correctly interpreted to define the scope and meaning of each limitation. *In re Paulsen*, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). The prior art reference must disclose each element of the claimed invention, as correctly interpreted, and as "arranged in the claim." *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

Independent Claims 1, 11 and 21 each call for a means for selectively adjusting an angle of inclination of the second disc screen section relative to the first disc screen section. The separating apparatus of '388 Bielagus does not include any means for adjusting an angle of inclination of the second section of the disc screen relative to the first section. While Fig. 1 of '388 Bielagus does illustrate a disc screen 14 with a downstream inclined segment (in phantom lines), the text referenced by the examiner does not describe, disclose or teach any means for adjusting its angle. (See column 5, lines 3 *et seq.* of '388 Bielagus). The disc screen of '388 Bielagus is constructed with a fixed inclined angle. On page 3 of the final Office Action mailed May 19, 2004, the examiner cited column 5, lines 3 *et seq.* of '388 Bielagus as allegedly disclosing a means for selectively adjusting a second angle of inclination of the second disc screen section relative to the first disc screen section without changing a first angle of inclination of the first disc section. That text is reproduced hereinafter for ease of consideration by the Board:

"As primarily depicted in Fig. 1, the screening bed 14 is substantially horizontal. It may, however, be advantageous to slant a portion, or all, of the screening bed upwardly or downwardly from the inlet to the outlet end. Thus, in Fig. 1, an elevated outlet end 70 is shown by phantom lines; and, in Fig. 2, an elevated inlet end 72 is shown. While Figs. 1 and 2 show substantially horizontal sections with the elevated portions, it should be understood that the entire bed may be inclined upwardly or angled downwardly from the inlet end to the outlet end." ['388 Bielagus]

Fig. 1 of '388 Bielagus is also reproduced hereafter for the convenience of the Board:



The quoted language from '388 Bielagus, along with Fig. 1 of '388 Bielagus, clearly demonstrate that the elevated outlet end 70 of screening bed 14 is fixed in terms of its angle of inclination and that there is no means for pivotally mounting the elevated outlet end 70, let alone adjusting the angle thereof disclosed either in this text, Fig. 1 or any other part of the disclosure of '388 Bielagus.

On the law of anticipation, Judge Learned Hand stated:

"No doctrine of the patent law is better established than that a prior patent or other publication to be an anticipation must bear within its four corners adequate directions for the practice of the patent invalidated. If the earlier disclosure offers no more than a starting point for further experiments, if its teaching will sometimes succeed and sometimes fail, if it does not inform the art without more how to practice the new invention, it has not correspondingly enriched the store of common knowledge, and it is not an anticipation."¹

There is nothing in Fig. 1 or column 5, lines 3 *et seq.* or any other part of '388 Bielagus which shows or describes any type of hydraulic cylinder, jack screw, pneumatic lifting mechanism, gear drive or any other mechanism for actively raising and lowering segment 70 of the disc screen. Nor does '388 Bielagus disclose any type of pivotable joint or mounting that would be required between the lower end of inclined section 70 and the horizontal section of the screening bed 14. To the contrary, '388 Bielagus teaches a fixed angle of inclination of section 70.

¹Dewey & Almy Chem. Co. v. Mimex Co., 124 F.2d 986, 989 (2d Cir. 1942).

For the foregoing reasons, the Board should reverse the lack of anticipation rejection of Claims 1-3, 6-19, 21, 22, 24-26 and 28-30.

Moreover, Claims 1-3 and 6-10 are patentable over '388 Bielagus because amended Claim 1 requires that the discs be dimensioned, configured and spaced for classifying a stream of mixed recyclable materials. The screen of '388 Bielagus is configured for separating and classifying wood chips or wafers. Independent Claim 11 does not expressly require that the discs be dimensioned, configured and spaced for classifying mixed recyclable materials.

Claims 21-30 are separately patentable because independent Claim 21 expressly requires first and second frames and means for pivotably mounting the second frame to the first frame. '388 Bielagus does not disclose first and second frames, or means for pivotably mounting one frame to the other frame.

8. *Moving Target Rejections*

Should the Board reverse the examiner's rejection, Applicant herein requests that prosecution on the merits not be reopened for the purpose of conducting an additional search and imposing new rejections. Recently, the undersigned attorney for the Applicant has encountered numerous moving target rejections, i.e., further office actions promulgated often after winning appeals, including new rejections based on art newly discovered by the examiner, and not as a result of any amendment or information disclosure statement filed by the Applicant. Moving target rejections violate numerous procedural guidelines as set forth in the MPEP, including Sections 707.02, 707.07(g) and 904.03. Moving target rejections unduly delay the grant of patents and diminish their term, overutilize USPTO resources, and burden inventors and their assignees with unnecessary fees and costs. The goal of patent examination is to fairly and expeditiously ensure that applications are proper as to form and meet all of the legal criteria for the granting of the exclusive rights being claimed. The goal should not be to see if the Applicant can be pressured into giving up the quest for a patent, or forced to accept unduly narrow claims by continually setting up new hoops for the Applicant to jump through. The undersigned attorney has been actively prosecuting U.S. patent applications for approximately thirty (30) years. Up until the last several years, a successful appeal to the Board was usually followed by a Notice of Allowance. Now, for inexplicable reasons, a successful appeal is often followed by a re-opening of prosecution on the merits. As a result, many of the patent applications

prosecuted by the undersigned have been prosecuted for an unreasonable amount of time. Inventors and clients are understandably perplexed by the ever growing backlog at the USPTO.

9. ***Conclusion***

It is submitted that for the foregoing reasons, all of the rejections should be reversed and a Notice of Allowance should be issued for this application. A check in the amount of \$170 is enclosed for the fee required for filing this Brief. Please charge any deficit or credit any excess to my Deposit Account No. 50-0626.

Respectfully submitted,


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Attorney for Applicant
Registration No.

CLAIMS APPENDIX

1. A recycling apparatus, comprising:

2 a first frame;
4 a first disc screen section including a plurality of laterally extending first shafts rotatably
6 mounted in the first frame and spaced along a longitudinal conveying direction, first drive
8 means for rotating the first shafts, and a plurality of first discs mounted on the first shafts, the
first discs being dimensioned, configured and spaced for classifying a stream of mixed recyclable
materials deposited onto the first discs as the first discs are rotated by the first drive means to
convey a first portion of the stream along the conveying direction to a first end of the first disc
screen section;

10 a second frame positioned adjacent to the first frame;

12 a second disc screen section having a first end immediately adjacent to the first end of
the first disc screen section and including a plurality of laterally extending second shafts
rotatably mounted in the second frame and spaced along the longitudinal conveying direction,
14 second drive means for rotating the second shafts, and a plurality of second discs mounted on
the second shafts, the second discs being dimensioned, configured and spaced for classifying the
16 first portion of the stream of mixed recyclable materials deposited onto the second discs from
the first disc screen section as the second discs are rotated by the second drive means to convey
18 a second portion of the stream along the conveying direction; and

20 means for selectively adjusting a second angle of inclination of the second disc screen
section relative to the first disc screen section without changing a first angle of inclination of the
first disc screen section.

2. The recycling apparatus of Claim 1 and further comprising means for pivotally
connecting the second frame to the first frame.

2. The recycling apparatus of Claim 1 wherein the means for selectively adjusting
the second angle of inclination of the second disc screen section includes a hydraulic cylinder.

4. The recycling apparatus of Claim 1 wherein the first frame and the second frame
2 have complementary mating surfaces that limit a range of articulation of the second frame
relative to the first frame.

4 5. The recycling apparatus of Claim 1 wherein the first frame further includes a third
frame and a third disc screen section including a plurality of laterally extending third shafts
6 rotatably mounted in the third frame and spaced along a second longitudinal conveying
direction, third drive means for rotating the third shafts, and a plurality of third discs mounted
8 on the third shafts, the third discs being dimensioned, configured and spaced for classifying a
third portion of the stream of mixed recyclable materials deposited onto the third discs..

6. The recycling apparatus of Claim 1 and further comprising a stand for supporting
2 the first and second frames.

7. The recycling apparatus of Claim 1 wherein the frames are formed of steel plates.

2 8. The recycling apparatus of Claim 1 wherein the first and second disc screen
sections are positioned end-to-end to form a single continuous classifying deck.

9. The recycling apparatus of Claim 1 wherein the first and second drive means
2 share a common motor and drive linkage.

10. The recycling apparatus of Claim 2 wherein the means for pivotally connecting
2 the second frame to the first frame includes an uppermost one of the first shafts.

11. A recycling apparatus, comprising:

2 a single continuous disc screen having first and second sections positioned end-to-end
and including a plurality of laterally extending shafts, a plurality of discs mounted on the shafts,
4 means for rotating the shafts in a common direction so that the discs will classify mixed
recyclable materials deposited onto the discs and convey a portion of the materials along a
6 conveying direction, and means for adjusting an angle of inclination of the second section
relative to the first section.

12. The recycling apparatus of Claim 11 wherein the apparatus further includes a
2 first frame for rotatably supporting a first portion of the shafts included in the first section and
a second frame for rotatably supporting a second portion of the shafts included in the second
4 section, and means for mounting the second frame for pivotal rotation relative to the first frame.

13. The recycling apparatus of Claim 12 wherein the mounting means includes a shaft
2 of the first section.

14. The recycling apparatus of Claim 11 wherein the means for adjusting the angle
2 of inclination includes a hydraulic cylinder.

15. The recycling apparatus of Claim 12 and further comprising a stand that supports
2 the first and second frames.

16. The recycling apparatus of Claim 11 wherein the first and second sections have
2 a generally planar configuration.

17. The recycling apparatus of Claim 16 wherein the second section has more shafts
2 than the first section.

18. The recycling apparatus of Claim 11 wherein the second section can be pivoted
2 so that the first and second sections form a single planar disc screen.

19. The recycling apparatus of Claim 11 wherein the shafts of the first section are
2 rotated by a first drive means and the shafts of the second section are rotated by a separate
second drive means.

20. A method of classifying mixed recyclable materials containing paper and
2 containers, comprising the steps of:

providing a single continuous inclined disc screen having a plurality of discs supported
4 on parallel shafts spaced along a conveying direction;
rotating the shafts in a common direction;
6 depositing the mixed recyclable materials onto the rotating discs; and

8 during the separation of the mixed recyclable materials by the rotating discs, adjusting
an angle of inclination of a downstream section of the disc screen relative to an upstream section
of the disc screen to ensure that mostly containers fall off a lower end of the disc screen and
10 mostly paper falls off an upper end of the disc screen.

21. A classifying apparatus, comprising:

a disc screen including a plurality of interleaved discs supported on parallel shafts spaced along a conveying direction, a first frame rotatably supporting a first portion of the shafts to define a first section of the disc screen, a second frame rotatably supporting a second portion of the shafts to define a second section of the disc screen, and means for pivotally mounting the second frame to the first frame;

at least one drive and drive linkage that rotates the shafts;

the discs having an outer contour shaped for agitating materials deposited onto the disc screen and for carrying at least a portion of the materials along the conveying direction when the discs are rotated in a common predetermined direction by the drive and drive linkage; and

means for selectively adjusting an angle of inclination of the second section of the disc screen relative to the first section of the disc screen in order to improve the separation of materials deposited onto the disc screen.

22. The apparatus of Claim 21 wherein the first frame and the second frame are carried by a stand.

23. The apparatus of Claim 21 wherein the frames have complementary mating surfaces that limits a range of articulation of the second frame relative to the first frame.

24. The apparatus of Claim 21 wherein the first section is fixed and the second section articulates relative to the first section via the selective adjusting means.

25. The apparatus of Claim 21 wherein the shafts of the first section are rotated by a first drive and a first drive linkage and the shafts of the second section are rotated by a second drive and a second drive linkage.

26. The apparatus of Claim 21 wherein the first section extends at a predetermined
2 fixed inclination and the second section is pivotal relative to the first section via the selective
adjusting means.

27. The apparatus of Claim 21 wherein the discs of the first section having a first
2 spacing that is different than a second spacing of the discs of the second section.

28. The apparatus of Claim 21 wherein the first and second sections are positioned
2 end-to-end to form a single continuous classifying deck.

29. The apparatus of Claim 21 wherein the discs of the first and second sections are
2 rotated by a common motor and drive linkage.

30. The apparatus of Claim 21 wherein the means for pivotally mounting the second
2 frame to the first frame includes a shaft of the first section.